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HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			NASH, LASHANYA RENEE	
			ART UNIT	PAPER NUMBER
			2153	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,527

Applicant(s)

RHODES, N. LEE

Examiner

LaShanya R Nash

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-45 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25, 26, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "the history cache for each user identifier" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests replacing with "the history cache for each identifier" for proper antecedent basis. For purposes of prior rejections claim is interpreted as "each identifier".

Claims 26 and 28 recite the limitation "the aggregation table entry" in lines 2 and 3, respectively. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests replacing with "the record event set" for proper antecedent basis. For purposes of prior rejections claim is interpreted as "the record event set".

Claim 27 recites the limitation "the aggregation table" in lines 2. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests

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replacing with “the record event set” for proper antecedent basis. For purposes of prior rejections claim is interpreted as “the record event set”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 37-38, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Porras et al. (US Patent 6,321,338), hereinafter referred to as Porras.

In reference to claim 1, Porras discloses a method for network surveillance that includes real-time measuring and monitoring of network traffic, in order to subsequently generate network statistical profiles (abstract). Porras explicitly discloses:

- A method for analyzing a stream of network data, (column 1, lines 44-54; column 4, line 60 to column 5, line 3; column 5, line 30-52; and column 3, lines 42-54), comprising:
 - Generating a statistical model (i.e. statistical profile) from a set of record events, (column 4, line 60 to column 5, line 3 and column 5, line 30-52);

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- Receiving a most recent record event, (column 2, lines 11-18 and column 6, lines 37-52); and
- Updating the statistical model using the most recent event by adding the most recent record to the statistical model, (column 2, lines 11-18 and column 6, lines 37-52).

In reference to claim 37, Porras explicitly discloses a system for employing the aforementioned method, (column 2, lines 2-10 and Figure 2). Porras explicitly shows:

- A network usage analysis system for analyzing a stream of network data, (column 2, lines 2-10; column 1, lines 44-54; column 4, line 60 to column 5, line 3; column 5, line 30-52; and column 3, lines 42-54) comprising:
 - A data analysis server (i.e. monitor) which generates a statistical model (i.e. statistical profile) from a set of record events, and upon receiving a most recent record event, the data analysis system server updates the statistical model using the most recent record event by adding the most recent record event to the statistical model, (column 3, lines 32-54; column 4, line 48 to column 5, line 3; column 2, lines 11-18 and column 6, lines 37-52).

All subsequent system claims will be discussed with the appropriately associated method claims.

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In reference to claim 45, Porras explicitly discloses a computer program product on a computer readable medium for employing the aforementioned method, (column 2, lines 25-35). Porras explicitly shows:

- A computer readable medium having computer executable instructions for performing a method for analyzing a stream of network data, (column 2, lines 25-35; column 1, lines 44-54; column 4, line 60 to column 5, line 3; column 5, line 30-52; and column 3, lines 42-54) the method comprising:
 - Generating a statistical model (i.e. statistical profile) from a set of record events, (column 4, line 60 to column 5, line 3 and column 5, line 30-52);
 - Receiving a most recent record event, (column 2, lines 11-18 and column 6, lines 37-52); and
 - Updating the statistical model using the most recent event by adding the most recent record to the statistical model, (column 2, lines 11-18 and column 6, lines 37-52).

In reference to claims 2 and 38, Porras explicitly shows the limitations, (column 6, lines 47-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porras et al. (US Patent 6,321,338) and further in view of Sarkissian et al (US Patent 6,771,646), hereinafter referred to as Porras and Sarkissian, respectively.

In reference to claim 13, Porras discloses a method for network surveillance that includes real-time measuring and monitoring of network traffic, in order to subsequently generate network statistical profiles (abstract). Porras explicitly discloses:

- A method for analyzing a stream of data over a rolling time (i.e. short-term or long-term) interval comprising, (column 1, lines 44-54; column 4, line 60 to column 5, line 3; column 5, line 30-52; and column 3, lines 42-54):
 - Defining a statistical model for analyzing the stream of data over the rolling time interval, (column 5, lines 30-52 and column 6, lines 38-52);
- Defining the rolling time interval to include a plurality of update intervals, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);
- Receiving a record event from the stream of data for each update time interval, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);

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- Generating the statistical model over the rolling time interval using the statistical model and each record event, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52); and
- Updating the statistical model using the statistical model and a most recent record event for a most recent update time interval, (column 2, lines 11-18 and column 6, lines 37-52).

Although Porras disclose substantial features of the claimed invention, the reference fails to explicitly disclose: storing the record event for each update in a history cache; and generating a statistical model each record event stored in the history cache. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Sarkissian.

In an analogous art, Sarkissian discloses a method that involves employing a cache subsystem for storing flow-based statistical measures, and subsequent supports real-time network monitoring (column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2). One of ordinary skill in the art would have been so motivated to implement this into feature into the aforementioned methodology as disclosed by Porras, so as to reduce latency time associated with memory accesses thereby improving process efficiency, (Sarkissian column 2, lines 57-67).

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Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras et al. (US Patent 6,321,338), and in view of Sarkissian et al (US Patent 6,771,646), and further in view of Kawasaki (US Patent 6,539,375) and Fishman et al. (US Patent Application Publication 2001/0037321), hereinafter referred to as Porras Sarkissian, Kawasaki, and Fishman respectively.

In reference to claim 23, Porras discloses a method for network surveillance that includes real-time measuring and monitoring of network traffic, in order to subsequently generate network statistical profiles (abstract). Porras explicitly discloses:

- A method for analyzing a stream of data over a rolling time (i.e. short-term or long-term) interval comprising, (column 1, lines 44-54; column 4, line 60 to column 5, line 3; column 5, line 30-52; and column 3, lines 42-54):
 - Defining a statistical model for analyzing the stream of data over the rolling time interval, (column 5, lines 30-52 and column 6, lines 38-52);
- Defining the rolling time interval to include a plurality of update intervals, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);
- Receiving a record event from the stream of data for each update time interval, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);
- Generating the statistical model over the rolling time interval using the statistical model and each record event, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52); and

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- Updating the statistical model using the statistical model and a most recent record event for a most recent update time interval, (column 2, lines 11-18 and column 6, lines 37-52).

Although Porras disclose substantial features of the claimed invention, the reference fails to explicitly disclose: storing the record event for each update in a history cache; and generating a statistical model each record event stored in the history cache. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Sarkissian.

In an analogous art, Sarkissian discloses a method that involves employing a cache subsystem for storing flow-based statistical measures, and subsequent supports real-time network monitoring (column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2). One of ordinary skill in the art would have been so motivated to implement this into feature into the aforementioned methodology as disclosed by Porras, so as to reduce latency time associated with memory accesses thereby improving process efficiency, (Sarkissian column 2, lines 57-67). In addition, the references fail to disclose: each record event set including one or more record events, wherein each record event is associated with a user identifier. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Kawasaki.

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In another analogous art, Kawasaki discloses associating record events to a use identification (i.e. user profile), used in a method for tracking network (i.e. Internet) usage of users, (column 2, lines 47-54; column 4, lines 42-61). This modification to the aforementioned method would have been obvious, because one of ordinary skill in the art would have been so motivated to identifier specific users in order to further correlate network activity records thereby improving detection of abnormal network activity, (Porras column 2, lines 54-64). In addition, the references fail to disclose updating only a portion of the statistical model associated with the most recent record event. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Fishman.

In another analogous art, Fishman discloses a method for generating statistical models, in which the aforementioned model is updated by processing only the newly available records, (paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract). One of ordinary skill in the art would have been so motivated to implement this modification into the aforementioned method in order to quickly update the model, thereby improving processing speed (Fishman paragraph [0037], lines 1-3).

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In reference to claim 26, Porras Sarkissian, Kawasaki, and Fishman explicitly show the limitations, (Fishman paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract).

Claims 29,31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras et al. (US Patent 6,321,338), and in view of Sarkissian et al. (US Patent 6,771,646), and further in view of Fishman et al. (US Patent Application Publication 2001/0037321) and Costa (US Patent 6,138,121) hereinafter referred to as Porras Sarkissian, Fishman, and Costa respectively.

In reference to claim 29, Porras discloses a method for network surveillance that includes real-time measuring and monitoring of network traffic, in order to subsequently generate network statistical profiles (abstract). Porras explicitly discloses:

- A method for analyzing a stream of data over a rolling time (i.e. short-term or long-term) interval comprising, (column 1, lines 44-54; column 4, line 60 to column 5, line 3;column 5, line 30-52; and column 3, lines 42-54):
 - Defining a statistical model for analyzing the stream of data over the rolling time interval, (column 5, lines 30-52 and column 6, lines 38-52);
 - Defining the rolling time interval to include a plurality of update intervals, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);

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- Receiving a record event from the stream of data for each update time interval, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52);
- Generating the statistical model over the rolling time interval using the statistical model and each record event, (column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52); and
- Updating the statistical model using the statistical model and a most recent record event for a most recent update time interval, (column 2, lines 11-18 and column 6, lines 37-52).

Although Porras disclose substantial features of the claimed invention, the reference fails to explicitly disclose: storing the record event for each update in a history cache; and generating a statistical model each record event stored in the history cache. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Sarkissian.

In an analogous art, Sarkissian discloses a method that involves employing a cache subsystem for storing flow-based statistical measures, and subsequent supports real-time network monitoring (column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2). One of ordinary skill in the art would have been so motivated to implement this into feature into the aforementioned methodology as disclosed by Porras, so as to reduce latency time associated with memory accesses thereby improving process efficiency,

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(Sarkissian column 2, lines 57-67). In addition, the references fail to disclose generating an aggregation table. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Costa.

In another analogous art, Costa discloses a method for network management in which an aggregation table is employed for tracking system data and generating statistical reports, (column 2, lines 21-31; column 8, lines 1-41; column 8, lines 53 to column 9, line 5). One of ordinary skill in the art would have been so motivated to implement this modification into the aforementioned method, so as to increase the ease of performing various actions (e.g. access, aggregate, extract, etc.) On relevant statistical data thereby increasing process efficiency, (Costa column 2, lines 15-18). In addition, the references fail to disclose updating only a portion of the statistical model associated with the most recent record event. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Fishman.

In another analogous art, Fishman discloses a method for generating statistical models, in which the aforementioned model is updated by processing only the newly available records, (paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract). One of ordinary skill in the art would have been so motivated to implement this modification into the aforementioned method in order to quickly update the model, thereby improving processing speed (Fishman paragraph [0037], lines 1-3).

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In reference to claims 31-35 Porras Sarkissian, Fishman, and Costa explicitly show the limitations, (Porras column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52; and Sarkissian column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2).

Claims 3 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras as applied to claims above, and further in view of Steinbiss et al. (US Patent 6,823,307), hereinafter referred to as Steinbiss.

In reference to claim 3 and 39, although Porras discloses substantial features of the aforementioned method, the reference fails to explicitly disclose the method further comprising the step of: storing the set of records in a history cache, and wherein if the history cache is full, updating the statistical model includes removing a least recent event from the statistical model. Nonetheless, this would have been an obvious modification to the aforementioned method, as disclosed by Porras, to one of ordinary skill in the art at the time of the invention, as further evidenced by Steinbiss.

In an analogous art, Steinbiss discloses a method for employing stochastic models that involves storing recently recognized elements in a cache, (abstract; column 2, lines 25-38; and column 5, lines 15-30). Steinbiss further discloses once the cache is full, removing the least recently stored element,

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(column 5, line 60 to column 6, line 7). This modification would have been obvious, because one of ordinary skill in the art would have been so motivated to implement this feature so as to maximize available memory space, thereby reducing cost associated with larger capacity cache memories, (Steinbiss column 5, line 66 to column 6, line 3).

Claims 4 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras and Steinbiss as applied to claims above, and further in view of Sarkissian et al. (US Patent 6,771,646), hereinafter referred to as Sarkissian.

In reference to claims 4 and 40, Porras and Sarkissian disclose substantial features of the claimed invention, specifically the statistical model (i.e. statistical profile) including an aggregation of each event record set, (Porras column 6, lines 38-52). However the references fail to explicitly disclose: generating a statistical model each record event stored in the history cache. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Sarkissian.

In an analogous art, Sarkissian discloses a method that involves employing a cache subsystem for storing flow-based statistical measures, and subsequent supports real-time network monitoring (column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2). One of ordinary skill in the art

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would have been so motivated to implement this into feature into the aforementioned methodology as disclosed by Porras, so as to reduce latency time associated with memory accesses thereby improving process efficiency, (Sarkissian column 2, lines 57-67).

Claims 5-6, 12, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras, Steinbiss, and Sarkissian as applied to claims above, and further in view of Costa et al. (US Patent 6,138,121), hereinafter referred to as Costa.

In reference to claims 5 and 41, Porras, Steinbiss, and Sarkissian show substantial features of the claimed invention, specifically the method wherein an identifier (i.e. category) is associated with each record event, (Porras column 5, lines 4-30 and column 5, lines 49-64). However, the references fail to show the method wherein generating a statistical model from the set pf record events includes generating an aggregation table for tracking and aggregation of record events associated with an identifier. Nonetheless, this modification to the aforementioned method, as disclosed by the references, would have been obvious to one of ordinary skill in the art at the invention, as further evidenced by Costa.

In an analogous art, Costa discloses a method for network management in which an aggregation table is employed for tracking system data and generating statistical reports, (column 2, lines 21-31; column 8, lines 1-41; column 8, lines 53 to column 9, line 5). One of ordinary skill in the art would have been so

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motivated to implement this modification into the aforementioned method, so as to increase the ease of performing various actions (e.g. access, aggregate, extract, etc.) on relevant statistical data thereby increasing process efficiency, (Costa column 2, lines 15-18).

In reference to claims 6 and 42, Porras, Steinbiss, Sarkissian, and Costa explicitly show the limitations, (Costa column 2, lines 21-31; column 8, lines 1-41; column 8, lines 53 to column 9, line 5).

In reference to claim 12 Porras, Steinbiss, Sarkissian, and Costa explicitly show the limitations, (Sarkissian column 19, line 55 to column 20, line 2).

Claims 7, 11, 14-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras, Steinbiss, Sarkissian, and Costa as applied to claims above, and further in view of Abounaga et al. (US Patent 6,460,045), hereinafter referred to as Abounaga.

In reference to claims 7 and 11, although Porras, Steinbiss, Sarkissian, and Costa show substantial features to the claimed invention, the references fail to show explicitly the method generating a histogram statistical model representative of the network data. Nonetheless, histogram statistical models were well known in the art at the time of the invention, as further evidenced by Abounaga. Therefore, this limitation would have been an obvious modification to

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the aforementioned method, as disclosed by the references, for one of ordinary skill in the art.

In an analogous art, Abounaga discloses a method of building histogram statistical models, (column 5, line 37 to column 6, line 3). This modification would have been obvious to one of ordinary skill in the art, so as to increase the accuracy of the statistical model estimations and thereby increasing process effectiveness, (Abounaga column 1, lines 54-55).

In reference to claims 14 and 24, Porras, Steinbiss, Sarkissian, Costa and Abounaga explicitly show the limitations, (Steinbiss column 5, line 60 to column 6, line 7).

In reference to claims 15-22, Porras, Steinbiss, Sarkissian, Costa and Abounaga explicitly show the limitations, (Sarkissian column 2, lines 30-32; column 2, lines 50-67; column 3, lines 1-15; column 4, line 54 to column 5, line 24; and column 19, line 55 to column 20, line 2).

In reference to claim 25, Porras, Steinbiss, Sarkissian, Costa and Abounaga explicitly show the limitations, (Costa column 2, lines 21-31; column 8, lines 1-41; column 8, lines 53 to column 9, line 5).

Claims 8-10, 30, and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras, Steinbiss, Sarkissian, and Costa as

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applied to claims above, and further in view of Fishman et al. (US Patent Application Publication 2001/0037321), hereinafter referred to as Fishman.

In reference to claims 8 and 43, the references Porras, Steinbiss, Sarkissian, and Costa fail to disclose updating only a portion of the statistical model associated with the most recent record event. Nonetheless, this would have been an obvious modification to the aforementioned method to one of ordinary skill in the art at the time of the invention, as further evidenced by Fishman.

In another analogous art, Fishman discloses a method for generating statistical models, in which the aforementioned model is updated by processing only the newly available records, (paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract). One of ordinary skill in the art would have been so motivated to implement this modification into the aforementioned method in order to quickly update the model, thereby improving processing speed (Fishman paragraph [0037], lines 1-3).

In reference to claims 9 and 44, Porras, Steinbiss, Sarkissian, Costs and Fishman explicitly show the limitations, (Porras column 2, lines 11-19 and column 5, lines 30-35; column 6, lines 38-52 and Costa column 2, lines 21-31; column 8, lines 1-41; column 8, lines 53 to column 9, line 5).

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In reference to claims 10 and 30, Porras, Steinbiss, Sarkissian, Costs and Fishman explicitly show the limitations, (Fishman paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract).

Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porras, Sarkissian, Kawasaki and Fishman as applied to claims above, and further in view of Abounaga et al. (US Patent 6,460,045), hereinafter referred to as Abounaga.

In reference to claim 27, although Porras, Steinbiss, Sarkissian, Kawasaki, and Fishman show substantial features to the claimed invention, the references fail to show explicitly the method generating a histogram statistical model representative of the network data. Nonetheless, histogram statistical models were well known in the art at the time of the invention, as further evidenced by Abounaga. Therefore, this limitation would have been an obvious modification to the aforementioned method, as disclosed by the references, for one of ordinary skill in the art.

In an analogous art, Abounaga discloses a method of building histogram statistical models, (column 5, line 37 to column 6, line 3). This modification would have been obvious to one of ordinary skill in the art, so as to increase the accuracy of the statistical model estimations and thereby increasing process effectiveness, (Abounaga column 1, lines 54-55).

In reference to claim 28, Porras, Steinbiss, Sarkissian, Costa, Fishman, and Abounaga explicitly show the limitations, (Abounaga column 5, line 37 to

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column 6, line 3 and Fishman paragraph [0008], lines 1-18; paragraph [0010], lines 1-5; and abstract).

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porras, Sarkissian, Fishman, and Costa as applied to claims above, and further in view of Abounaga et al. (US Patent 6,460,045), hereinafter referred to as Abounaga.

In reference to claim 36, although Porras, Sarkissian, Fishman, and Costa show substantial features to the claimed invention, the references fail to show explicitly the method generating a histogram statistical model representative of the network data. Nonetheless, histogram statistical models were well known in the art at the time of the invention, as further evidenced by Abounaga. Therefore, this limitation would have been an obvious modification to the aforementioned method, as disclosed by the references, for one of ordinary skill in the art.

In an analogous art, Abounaga discloses a method of building histogram statistical models, (column 5, line 37 to column 6, line 3). This modification would have been obvious to one of ordinary skill in the art, so as to increase the accuracy of the statistical model estimations and thereby increasing process effectiveness, (Abounaga column 1, lines 54-55).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShanya R Nash whose telephone number is (571)272-3957. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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